

A B S T R A C T

METHOD OF FINE SYNCHRONIZATION TO A SIGNAL RECEIVED FROM
A TRANSMISSION CHANNEL

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The invention relates to a method of fine synchronization to a receive signal (S) corresponding to a reference signal (TS) transmitted in a transmission channel. The method includes the following steps:

- 10 - selecting a source signal producing a characterization signal (X) after it has passed through said transmission channel,
- establishing a characterization matrix (L) for estimating the covariance of the characterization signal
- 15 (X),
- identifying dominant eigenvalues which are the highest eigenvalues (λ_i) of the characterization matrix (L),
- calculating the correlation function $c(t)$ of the source signal with the sum of the eigenvectors (v_i) associated
- 20 with the dominant eigenvalues, and
- searching for the first maximum of the correlation function $c(t)$.

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Translation of the title and the abstract as they were when originally filed by the

35 Applicant. No account has been taken of any changes that may have been made subsequently by the PCT Authorities acting ex officio, e.g. under PCT Rules 37.2, 38.2, and/or 48.3.